

Weaver Road Bridge  
Weaver Road (County Rd. A323)  
spanning Paint Rock Creek  
Kingston Vicinity  
Roane County  
Tennessee

HAER No. TN-6

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WRITTEN HISTORICAL AND DESCRIPTIVE DATA

PHOTOGRAPHS

Historic American Engineering Record  
National Park Service  
Southeast Region  
Department of the Interior  
Atlanta, Georgia 30303

HISTORIC AMERICAN ENGINEERING RECORD

TN-6

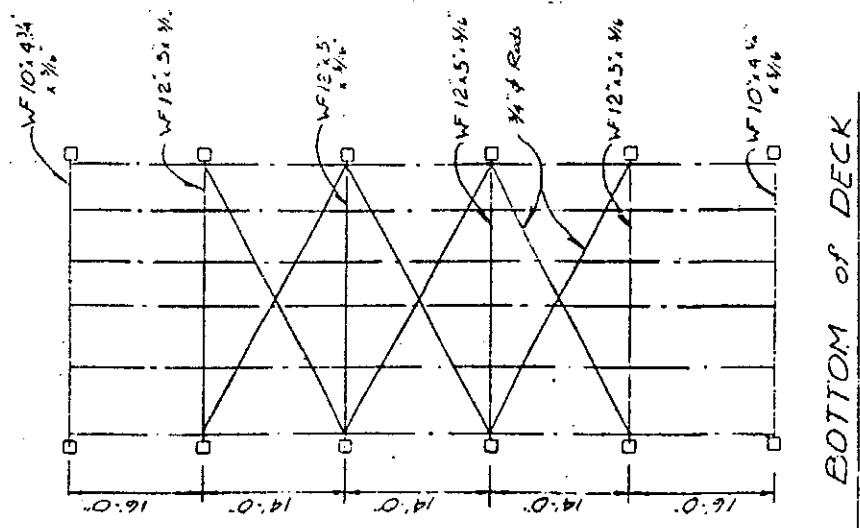
WEAVER ROAD BRIDGE

Bridge Type: Pony Pratt Bedstead  
Date: 1898  
Location: Weaver Rd (County Rd. A323) spanning Paint Rock Creek,  
Kingston Vicinity, Roane County, Tennessee.  
Builder: Champion Bridge Company, Wilmington OH.  
Owner: Roane County  
Significance: The Weaver Road Bridge derives its significance from its  
representative nature as an example of the pony Pratt  
Bedstead truss type as well as its association with the  
Champion Bridge Company.

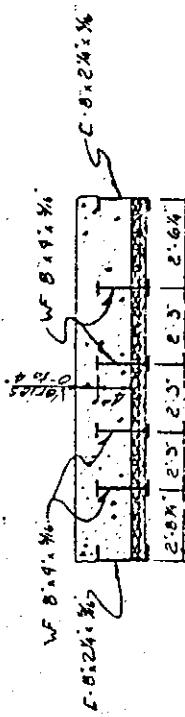
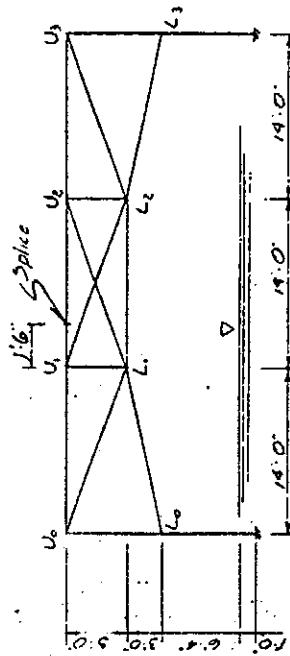
Description The Weaver Rd. Bridge is 76 feet in length and contains two steel I-beam spans and one pony truss. The truss span is a 42-foot steel three-panel pony (low) Pratt Bedstead truss. Each steel I-beam approach span is 17 feet in length. The curb-to-curb width is 12 feet and the out-to-out width is 14 feet. The height of the pony truss is five feet above floor level. The end posts are 15 feet in height (from top chord to the ground). All joints are pin-connected and the deck is concrete.

The top chord is composed of channels connected with lacing underneath. The end posts are channels connected with double lacing on top as well as underneath. The other vertical members are paired angles connected with double lacing. The bottom chord of each flanking panel is an H-beam extending at an angle from the hip vertical to a point on the end post three feet below the floor level.

The bridge was erected in 1898 by the Champion Bridge Company of Wilmington, Ohio. This company was officially founded in the 1870's as an outgrowth of general bridge work done by carpenter Zimri Wall prior to the Civil War. The company had branch offices in Atlanta and Chattanooga and thus built numerous bridges throughout the South. The company is still in existence and is probably the oldest surviving bridge company in the United States. Several bridges by this company remain in Tennessee.

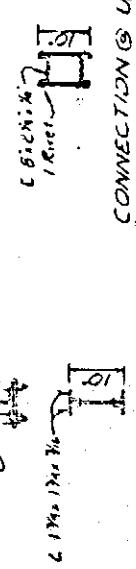
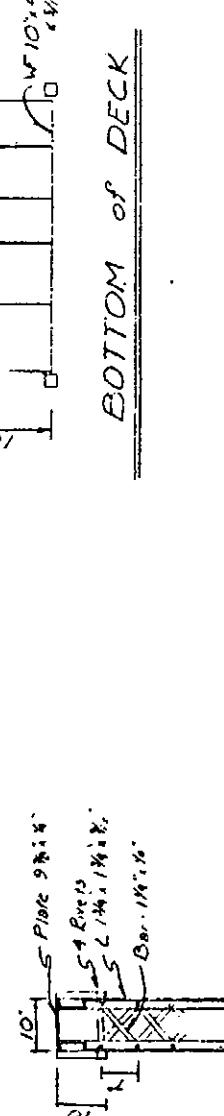


U <sub>1</sub> - U <sub>1</sub> , U <sub>2</sub> - U <sub>3</sub>	2'-0" 5 1/4", 4"
L <sub>2</sub> - U <sub>2</sub> , U <sub>3</sub> - U <sub>1</sub>	2'-0" 6 1/2", 4"
L <sub>3</sub> - U <sub>3</sub> , U <sub>1</sub> - U <sub>2</sub>	2'-0" Bar 1" 1/2", 4"
L <sub>1</sub> - U <sub>1</sub> , L <sub>2</sub> - U <sub>2</sub>	2'-0" Bar 1" 1/2", 4"
L <sub>2</sub> - U <sub>2</sub> , L <sub>3</sub> - U <sub>3</sub>	2'-0" Bar 1" 1/2", 4"
L <sub>1</sub> - U <sub>1</sub> , L <sub>2</sub> - U <sub>2</sub> , L <sub>3</sub> - U <sub>3</sub>	5' 5 1/2", 4"
L <sub>1</sub> - U <sub>1</sub> , L <sub>2</sub>	2'-0" Bar 1" 1/2", 4"



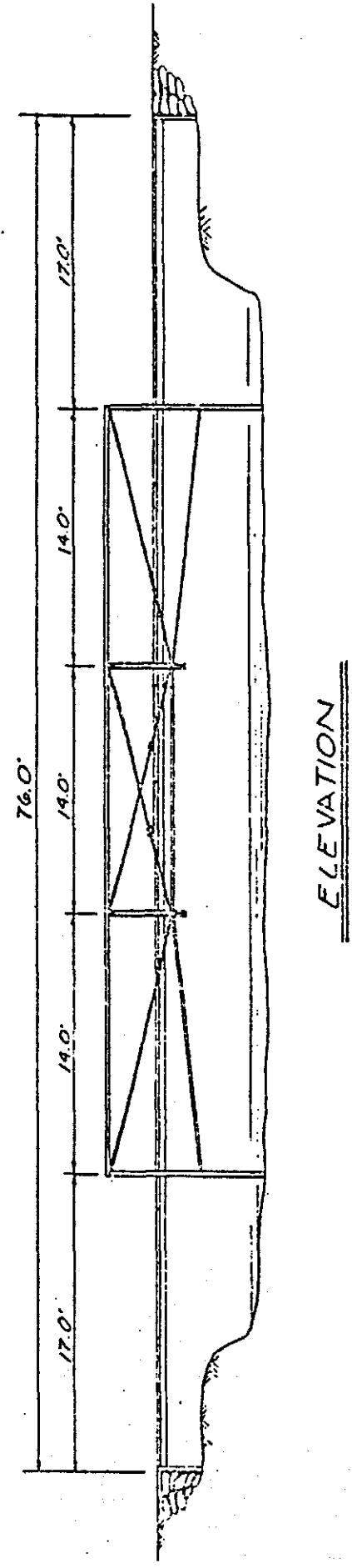
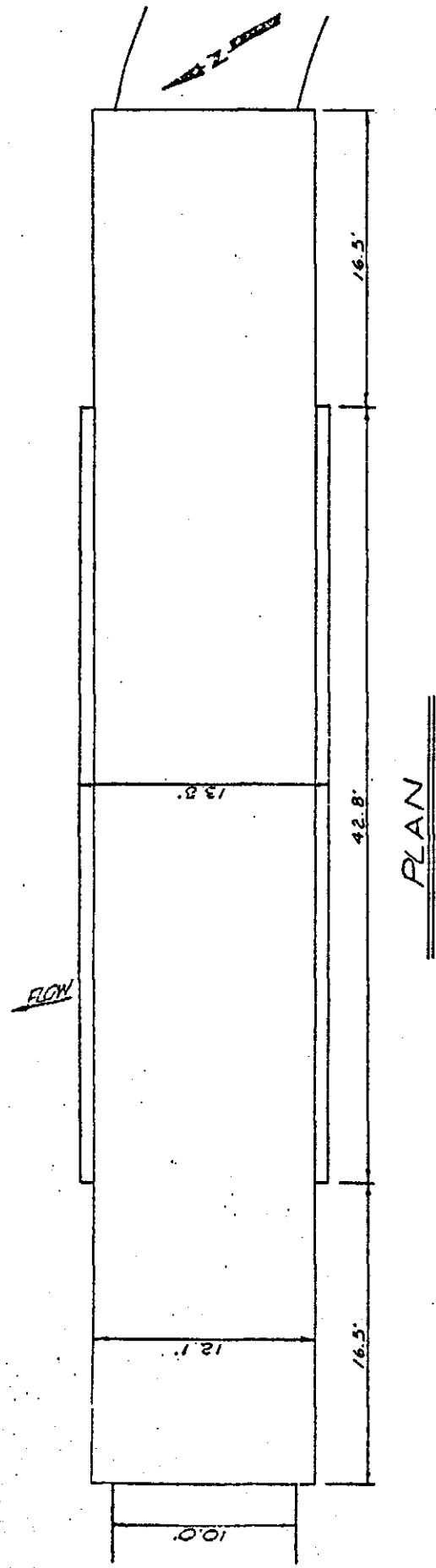
TYPIAL DECK SECTION

SPICE DETAIL



CONNECTIONS U<sub>1</sub>, U<sub>2</sub>, U<sub>3</sub>

CONNECTIONS U<sub>1</sub>, U<sub>2</sub>



Weaver Road over Paint Rock Creek  
73-A323-2.19

# NAER INVENTORY

U.S. Department of Interior  
Heritage Conservation and Recreation Service

1. SITE I.D. NO. H A E R T N - 6

2. INDUSTRIAL CLASSIFICATION BRIDGE, PONY (LDW) STEEL TRUSS	3. PRIORITY 7 6 0 3	4. DANGER OF DEMOLITION? (SPECIFY THREAT) TO BE REPLACED ON EXISTING SITE IN 19 B 3	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN
DESIGNATION: 73-A323-2.19	5. DATE 18 98	6. GOVT SOURCE OF THREAT	<input type="checkbox"/> OWNER <input checked="" type="checkbox"/> ADMIN
	7. OWNER/ADMIN RDANE COUNTY		

8. NAME(S) OF STRUCTURE WEAVER ROAD BRIDGE (COUNTY ROAD #: A 323)

9. OWNER'S ADDRESS HIGHWAY SUPERVISOR  
ROAEE COUNTY COURTHOUSE  
KINGSTON, TN. 37763

10. STATE T N COUNTY NAME ROANE COUNTY	CITY/VICINITY KINGSTON	CONG. DIST. 6 3	STATE T N COUNTY 6 7 3	CITY/VICINITY KINGSTON	CONG. DIST. 6 3
11. SITE ADDRESS (STREET & NO.) WEAVER ROAD ACROSS PAINT ROCK CREEK NEAR PAINT ROCK	12. EXISTING SURVEYS	NHL <input type="checkbox"/> HABS <input checked="" type="checkbox"/> HAER <input type="checkbox"/> LOCAL	NRA <input type="checkbox"/> CONF <input type="checkbox"/> STATE <input type="checkbox"/> COUNTY	NPS <input type="checkbox"/> OTHER T-DOT	CL6 <input type="checkbox"/>

13. SPECIAL FEATURES (DESCRIBE BELOW)

14. UTM ZONE EASTING NORTHING SIGN SCALE 1:24 1:62.5	15. CONDITION 70 <input checked="" type="checkbox"/> EXCELLENT 71 <input type="checkbox"/> GOOD 72 <input type="checkbox"/> FAIR 73 <input checked="" type="checkbox"/> DETERIORATED	16. INVENTORIED BY MARTHA CARVER	17. DESCRIPTION AND BACKGROUND HISTORY, INCLUDING CONSTRUCTION DATE(S), HISTORICAL DATE(S), PHYSICAL DIMENSION(S), MATERIALS, EXISTANT EQUIPMENT, AND IMPORTANT BUILDERS, ENGINEERS, ETC.
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IN 1897 THE RDANE COUNTY COURT APPOINTED A COMMITTEE TO CONTRACT FOR AN IRON OR STEEL BRIDGE "NEAR ROBERT WEBSTER'S" OVER PAINT ROCK CREEK "DF AT LEAST SIX TONS." IN APRIL 1898 THE COMMITTEE REPORTED THAT THE BRIDGE WAS COMPLETED AND THAT THEY HAD RECEIVED EIGHT BIDS FROM VARIOUS BRIDGE COMPANIES RANGING IN PRICE FROM \$ 990.00 TO \$ 1,250.00. THE COMMITTEE SELECTED THE LDW BIDDER, THE CHAMPION BRIDGE COMPANY OF WILMINGTON, OHIO. THE COMMITTEE ALSO DESCRIBED THE BRIDGE AND STATED THAT IT HAD BEEN "MADE TO COOPER'S SPECIFICATIONS CLASS C FOR 1896 HIGHWAY BRIDGE". (2) THE WEAVER ROAD BRIDGE IS 76 FEET IN LENGTH AND CONTAINS TWO STEEL I-BEAM SPANS (EACH SEVENTEEN FEET IN LENGTH) AND ONE TRUSS SPAN (A 42- FOOT STEEL PONY TRUSS SPAN). THE TRUSS IS A THREE PANEL PIN-CONNECTED PONY (LDW) PRATT BEDSTEAD TRUSS. THE HEIGHT OF THE PONY TRUSS IS FIVE FEET ABOVE THE DECK. THE END POSTS ARE FIFTEEN FEET IN HEIGHT FROM THE TOP CHORD TO THE GROUND. ON EACH END, THE BOTTOM CHORD IS CONNECTED AT A DIAGONAL SLANT FROM A VERTICAL MEMBER TO THE VERTICAL END POST. THE CURB-TO-CURB WIDTH IS 12.1 FEET WHILE THE DUT-TO-OUT WIDTH IS 13.8 FEET. THE STEEL LEGS OF THE TRUSS ARE EMBEDDED IN CONCRETE. THE DECK IS... CONCRETE...

THE TOP CHORD IS COMPOSED OF CHANNELS CONNECTED WITH LACING UNDERNEATH. THE END POSTS ARE CHANNELS CONNECTED WITH DOUBLE LACING ON TOP AS WELL AS UNDERNEATH. THE OTHER VERTICAL MEMBERS ARE PAIRED ANGLES CONNECTED WITH DOUBLE LACING. THE BOTTOM CHORD OF THE CENTRAL PANEL OF THE TRUSS IS AN H-BEAM EXTENDED AT AN ANGLE FROM THE HIP VERTICAL TO A POINT ON THE END POST THREE FEET BELOW THE FLOOR LEVEL. THE BOTTOM CHORD OF EACH FLANKING PANEL IS AN H-BEAM AS AN OUTGROWTH OF GENERAL BRIDGE WORK DONE BY CARPENTER ZIMRI WALL PRIOR TO THE CIVIL WAR.

THE CHAMPION BRIDGE COMPANY WAS OFFICIALLY FORMED IN THE 1870's AS AN OUTGROWTH OF THE COMPANY HAD BRANCH OFFICES IN ATLANTA AND CHATTANOOGA AND THUS BUILT NUMEROUS BRIDGES THROUGHOUT THE SOUTHEAST. SEVERAL BRIDGES BY THIS COMPANY REMAIN IN TENNESSEE.

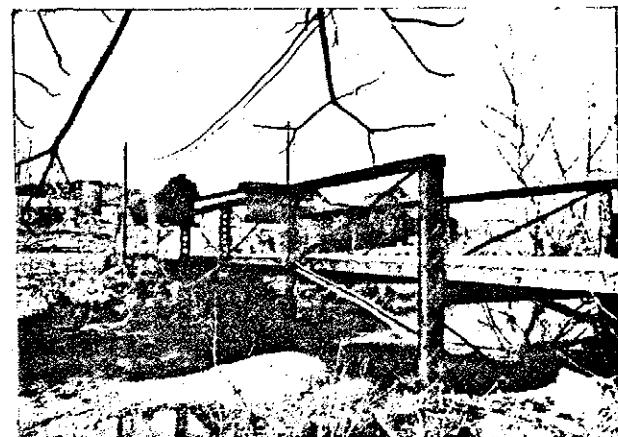
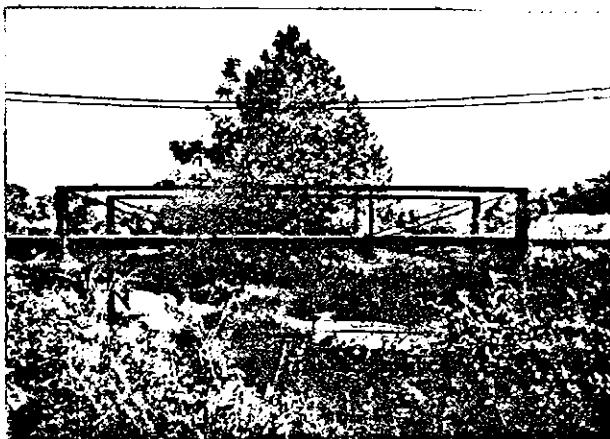
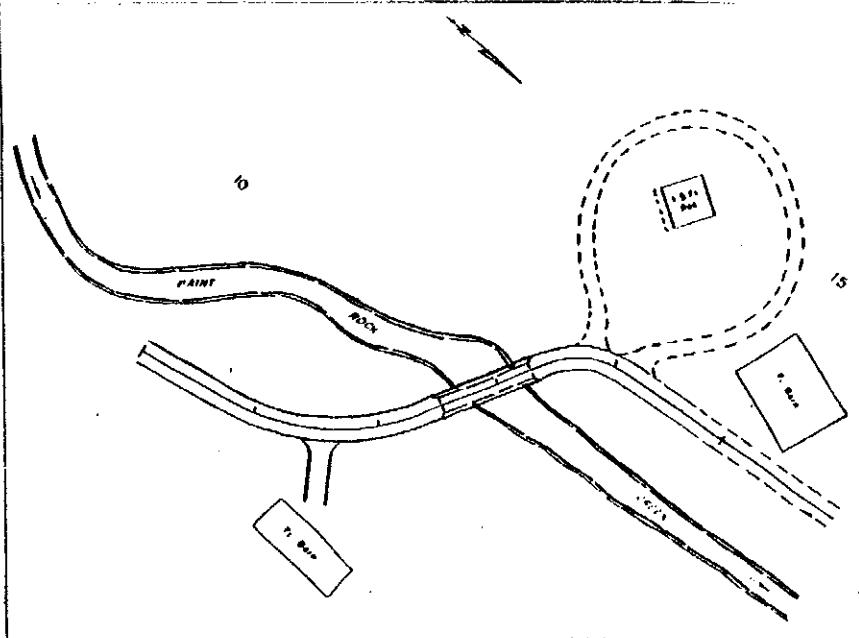
18. ORIGINAL USE VEHICULAR BRIDGE (TO BE DEMOLISHED IN 1983)

PRESENT USE ADAPTIVE USE

19. REFERENCES—HISTORICAL REFERENCES, PERSONAL CONTACTS, AND/OR OTHER RDANE COUNTY COURT MINUTES, ROLL 103, VOLUME D-2, P. 433, \$12-14, AVAILABLE AT THE TENNESSEE STATE ARCHIVES, NASHVILLE, TENNESSEE.

20. URBAN AREA 50,000 POP OR MORE? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	21. S E	22. PUBLIC ACCESSIBILITY <input checked="" type="checkbox"/> YES, LIMITED <input type="checkbox"/> YES, UNLIMITED <input type="checkbox"/> NO <input type="checkbox"/> UNKNOWN	23. EDITOR INDEXER
24. LOCATED IN AN HISTORIC DISTRICT? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	NAME	DISTRICT I.D. NO	

(CONT'D)



### Significance

THE WEAVER ROAD BRIDGE DERIVES ITS SIGNIFICANCE FROM ITS ENGINEERING MERITS AS A REPRESENTATIVE EXAMPLE OF THE PRATT BEDSTEAD TRUSS TYPE AS WELL AS ITS ASSOCIATION WITH THE CHAMPION BRIDGE COMPANY.

REFERENCES (CONTINUED)

- 1) ROANE COUNTY COURT MINUTES, ROLL 103, VOLUME D-2, P. 433.  
2) ID., PP. 512-14. A COPY OF THE CONTRACT WITH CHAMPION BRIDGE COMPANY IS INCLUDED.

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(1) ROANE COUNTY COURT MINUTES, ROLL 103, VOLUME D-2, P. 433.  
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